

COLLABORATION AND COMMUNICATION OF GLOBAL RISK ASSESSMENT INFORMATION

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ABSTRACT

With limited resources to keep up with a high demand for risk assessment products, it is critical that existing information is readily available and that risk assessors collaborate during the risk assessment process.

Several global risk assessment tools are available to address these issues. First, the Alliance for Risk Assessment (ARA) is a collaboration of organizations dedicated to supporting public health protection by working together on projects to improve the process, efficiency, and quality of risk assessment. Second, the International Toxicity Estimates for Risk (ITER) is a free Internet database of chronic human health risk assessment data from organizations around the world for 650+ chemicals. ITER is available at www.tera.org/iter and on National Library of Medicine's TOXNET system (<http://toxnet.nlm.nih.gov/>).

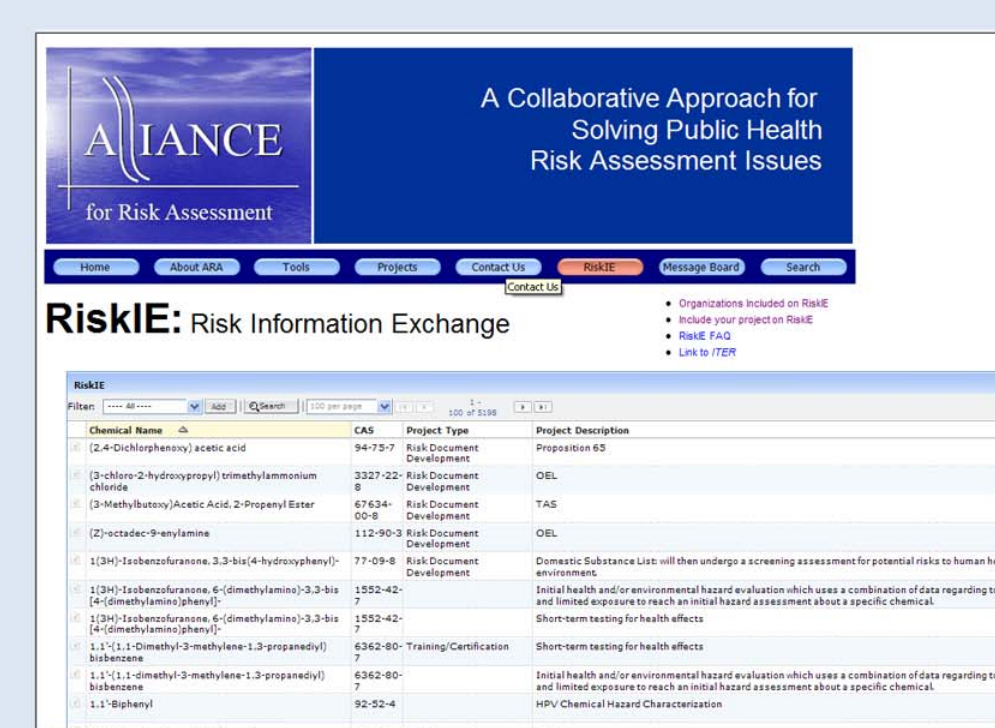
Finally, the Risk Information Exchange (RiskIE) is a free Internet database that contains notifications about a variety of human health risk assessment projects that are underway or recently completed. RiskIE is available at <http://www.allianceforrisk.org/RiskIE.htm> and will join ITER on TOXNET. ITER and RiskIE provide risk assessors essential tools for easily identifying and comparing available human health risk data, for sharing in progress risk assessments, and for enhancing

Chemical risk assessment struggles to keep up with with chemical synthesis and use.

interaction among risk assessment groups to decrease duplication of effort. ITER and RiskIE were developed by Toxicology Excellence for Risk Assessment (TERA) and are also resources that support the mission of the ARA by tracking up-to-date information on risk assessment activities.

RISKIE RISK INFORMATION EXCHANGE

Created in 2007, Risk Information Exchange (RiskIE) is a free Internet database that contains notifications about in progress or recently completed human health risk assessment projects. RiskIE includes notification of chemical-specific risk value and methods document development, as well as training classes and white papers. By providing a centralized source of project information, RiskIE aims to help bridge communication gaps among government, industry, academic, and environmental stakeholders of the risk assessment community, allowing users to identify potential areas for collaboration.



5,600+
In-progress or recently completed human health risk values being conducted by 30 organizations representing 13 countries across the world

A search for ethylbenzene identifies 8 organizations work on ethylbenzene risk assessment projects.

Substances/Project	CAS	Project Year	Project Description	Status	Date of Completion	Organization	Contact	Link
ethylbenzene	106-62-0	2010-2011	Health Hazard Assessment of Ethylbenzene	In Progress	2011	Health Canada	Health Canada	http://www.hc-sc.gc.ca/
ethylbenzene	106-62-0	2010-2011	Health Hazard Assessment of Ethylbenzene	In Progress	2011	Health Canada	Health Canada	http://www.hc-sc.gc.ca/
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ethylbenzene	106-62-0	2010-2011	Health Hazard Assessment of Ethylbenzene	In Progress	2011	Health Canada	Health Canada	http://www.hc-sc.gc.ca/

ORGANIZATIONS INCLUDED

- Organizations based on Health Hazard Assessment of Ethylbenzene
- American Conference of Governmental and Industrial Hygienists
- American Industrial Hygiene Association
- Agency for Toxic Substances and Disease Registry
- California Environmental Protection Agency
- Department of the Environment (UK), Environmental Hazard Assessment
- Environment Canada
- European Chemicals Bureau
- Food Standards Agency (UK)
- Hawaii Department of Health Hazard Evaluation
- Health Canada
- International Agency for Research on Cancer
- Institution for Statutory Accident Insurance and Prevention in the Chemical Industry (IG-CH) (Germany)
- International Programme for Chemical Safety
- Michigan Department of Environmental Quality: Air Toxics Division
- Ministry of Health, Labour, and Welfare (Japan)
- National Academy of Sciences
- National Chemicals Inspectorate (Sweden)
- National Environmental Research Institute (Denmark)
- National Industrial Chemicals Notification and Assessment Scheme (Australia)
- National Institute for Occupational Safety and Health
- National Resources Canada
- National Toxicology Program
- Nordic Expert Group (Denmark, Finland, Iceland, Sweden, and Norway)
- NSF International
- Organization for Economic Co-operation and Development (OECD)
- Texas Commission on Environmental Quality
- Toxicology Excellence for Risk Assessment
- United States Environmental Protection Agency (AELG, HPV, IRIS, OPP)

ITER INTERNATIONAL TOXICITY ESTIMATES FOR RISK

Created in 1996, the International Toxicity Estimates for Risk (ITER) is a free Internet database of chronic human health risk values and/or cancer classifications for over 650 chemicals from a variety of authoritative groups worldwide. ITER provides a centralized source of peer reviewed risk data, with a description of the methodologies used by different organizations.

ITER PROVIDES:

- Chronic human health risk data in a side by side format
- A synopsis that explains the underlying basis and rationale for each risk value and differences in risk values
- A link to each organization's website or source document
- A forum through which independent parties can share their peer reviewed risk values
- A way to ensure that risk managers do not "miss" useful data

650+

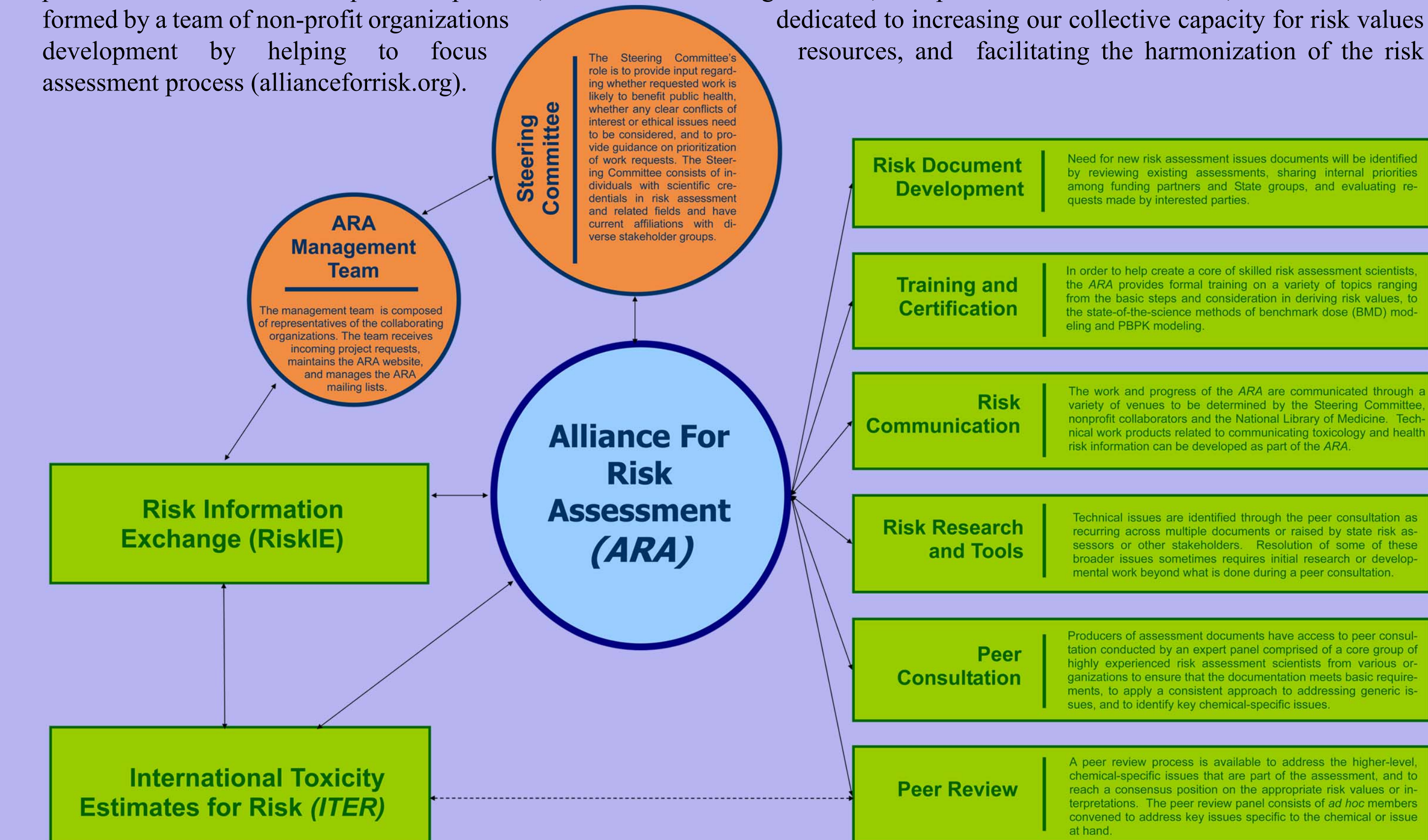
Chemicals on ITER with peer reviewed, chronic human health risk data from organizations around the world

ORGANIZATIONS INCLUDED

- Agency for Toxic Substances & Disease Registry (ATSDR)
- Health Canada
- International Agency for Research on Cancer (IARC) (in progress)
- NSF International
- National Institute of Public Health & the Environment (RIVM)
- U.S. Environmental Protection Agency (EPA)
- Independent parties whose risk values have undergone peer review.

ARA ALLIANCE FOR RISK ASSESSMENT

The Alliance for Risk Assessment (ARA) is a collaborative effort of organizations dedicated to supporting public health protection by improving the process and efficiency of risk assessment. Given a limited supply of time, resources, and know-how, public health protection is an effort that requires cooperation, formed by a team of non-profit organizations dedicated to increasing our collective capacity for risk values development by helping to focus assessment process (allianceforrisk.org).



GUIDING PRINCIPLES

- Promote science-based decision making to protect human health
- Enhance harmonization and consistency in risk assessments through an open, transparent, multi-stakeholder approach
- Maintain access to groups of risk assessment experts that are normally not available within a single organization, agency or state
- Share costs, information, and human resources among multiple stakeholders to increase the capacity and quality of risk values

BENEFITS OF THE ALLIANCE MODEL

CREDIBILITY

Projects are evaluated by the ARA Steering Committee, composed of a broad range of experts from various backgrounds and perspectives. The involvement of diverse interests:

- enhances credibility
- ensures careful consideration of all key data and ideas
- provides thoughtful management of potential biases
- indicates the importance of a project to the broader risk assessment community

SHARING OF RESOURCES

The collaborative nature of the ARA centers on the pooling of resources. ARA participants benefit from access to:

- Technical resources- ARA provides access to experienced scientists and experts not typically found within a single organization.
- Financial Resources- For organizations with limited funding, ARA offers help covering the costs of a project, and will assist in identifying potential co-sponsors.
- Information- ARA participants keep each other informed of their activity, creating opportunities for collaboration.

EXPOSURE

The ARA encourages the free-flow of information across organizations. Projects that utilize the ARA process will be broadcast within the Risk assessment community via:

- RiskIE- The Risk Information Exchange is a free internet database that tracks in-progress risk and toxicity assessments
- ITER- The International Toxicity Estimates of Risk database lists chronic human health risk values
- ARA Newsletter-Website- ARA maintains an up-to-date website with descriptions of ongoing projects. Newsletter updates are sent regularly to the risk assessment community

CONCLUSION

With a growing pool of unevaluated chemicals and limited resources, responsible public health protection requires the risk assessment community shares existing risk assessment information and collaborates during the risk assessment process to reduce duplicate efforts. The ITER database (www.tera.org/iter) provides risk assessors easy access to peer reviewed chronic human health risk assessment data from a variety of organizations worldwide. The RiskIE database (www.allianceforrisk.org/RiskIE.htm) offers a window into the activities of participating organizations, providing notifications of in-progress human health risk assessment work to promote networking and collaboration. Using these databases, the Alliance for Risk Assessment (www.allianceforrisk.org) actively works to connect groups working on similar issues, and provides a forum through which organizations can combine and efficiently focus resources.

Overall, these three resources provide risk assessors essential tools for readily locating and comparing available risk data, for sharing progress of work, and for identifying and implementing opportunities for collaboration among organizations. The overall effect is to focus resources, reduce duplication of effort, and improve efficiency in human health risk assessment.